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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,714	07/05/2005	Klaus-Eckhart Dobernecker	982/002	9812
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GAMINO, CARLOS J				
ART UNIT		PAPER NUMBER		
4162				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/541,714

Applicant(s)

DOBERNECKER, KLAUS-ECKHART

Examiner

CARLOS GAMINO

Art Unit

4162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “forced guidance”, “take-up element”, “rotatable shaft” and “releasably attached” anvils must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “2 and 2'” have been used to designate both **anvils** and

anvil legs. For the purpose of examination it will be assumed that figure 4 is mislabeled 2 and 2' and that only the anvil legs, 3, and springs, 6, are labeled correctly. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show **"forced guidance" connection to the "anvil legs" and the "releasably attached" anvils** as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. ***The drawings are objected to because when comparing figures 2 and 3 it appears that the sonotrode is the object that is moving and not the anvils. Also the reference number "1" in figures 1-3 resembles a seven. The examiner would like these objections clarified.*** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Hand Held Ultrasonic Welding Device with Pivoting Anvils.

6. The disclosure is objected to because of the following informalities: on page 5, lines 18-20 it seems that the springs are in tension but, on page 8, lines 1-2 the springs are said to be "compressed". It is not clear how the springs could be "compressed" if the anvils are closed as shown in figure 3.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 15-19, 21 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

9. Claims 15-19 are rejected because the specification and drawings do not clearly state how the "displacement movement in the direction of the sonotrode" is performed.

If the applicant means that the anvils are pulled back along the direction of the sonotrode then there is no clear understanding as to how the "forced guidance ", "take-up element" or "rotatable shaft" connect to the anvil legs and allows them to pivot while simultaneously being pulled back in the direction of the sonotrode. Also, when comparing figures 2 and 3 it appears that the sonotrode is the object that is moving and not the anvils.

10. Claim 21 is rejected because the releasability of the "releasably attached" anvils is not clearly described by the specification or drawings.

11. Claim 23 is rejected because it is unclear how the force, that moves the anvils toward each other, is transferred through the adjusting element to the anvils if the adjusting element is a spring. The springs appear to be in tension and would not cause the anvils to close. The specification states that the springs "pull", which implies tension, page 5 lines 18-19 and it also states the springs are compressed, page 8 line 1, which is a contradiction. The true state of the springs and how they operate cannot be determined from the specification or the drawings. For the purpose of this examination it will be assumed that the springs are in tension.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 20 and 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claim 20 recites the limitation "the form". There is insufficient antecedent basis for this limitation in the claim.

15. Claims 23-25 recite the limitations "at least one adjusting element", "a spring element" and "the spring element" respectively. It appears from the drawing and specification that at least 2 adjusting elements are required to make the device function properly.

16. Claims 26-28 provide for the use of the device, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 26-28 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 15-20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bartholomew et al. (US 6,136,118). '118 teaches a hand held ultrasonic

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welding device with a pistol grip, figure 1. The gun has anvils (80) which pivot towards each other simultaneously while being drawn back towards the sonotrode (76) to form a chamber to compress the objects being joined, figures 13-16, column 7, lines 29-39. The anvils are moved by the motion of a rotatable shaft (crankshaft 72), figure 6, column 7, lines 39-59. The device is actuated by a trigger (18) as shown in figure 1, column 5, lines 60-67. Lastly, flexible hinged portions (104) permanently exert force to keep the anvils open, figure 6.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew et al. (US 6,136,118) as applied to claim 15 above, and further in view of Edwards et al. (US 5,137,200). '118 does not teach that the anvil heads can be releasably attached. '200 teaches that anvil heads (22) can be changed so that they can "accommodate various shapes of workpieces", figure 4, column 5, lines 29-32. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of '200 to make the anvils releasable in order to "accommodate various shapes of workpieces". This is also significantly cheaper than buying a new machine for each different type of workpiece that needs to be welded. .

20. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew et al. (US 6,136,118) as applied to claim 15 above, and further in view of Obeda (US 4,032,382). '118 does not teach the use of a spring to hold the anvils open. '382 teaches the use of a tension spring (15) between the anvils to hold the anvils open, figure 2, column 2, lines 43-47. One of ordinary skill in the art would recognize that flexible hinged portions and spring tension portions are mechanical equivalents. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of '382 to make the flexible hinged portions (104) of '118 into spring tension components. This substitution would prevent the flexible hinged portions from breaking if they were over stressed and would also allow the anvil jaws to open up wider.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 2,766,631 (P.R. van Sittert) teaches the use of springs to open jaws.
- US 3,559,448 (D. Illingworth et al.) teaches the use springs to open jaws.
- US 4,534,817 (O'Sullivan) teaches a hand held ultrasonic gun.
- US 4,596,352 (Knapp) teaches the use of different anvils.
- US 4,703,158 (Burgher et al.) teaches dual pivoting ultrasonic anvils.
- US 4,782,990 (Patrikios et al.) teaches a hand held ultrasonic gun.
- US 4,842,671 (Nuss) teaches a hand held ultrasonic gun.
- US 5,410,903 (Scheider) teaches crimping jaws.

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- US 5,509,994 (Recchia et al.) teaches a hand held ultrasonic gun.
- US 2006/0006152 A1 (Eek et al.) teaches a hand held spot welder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS GAMINO whose telephone number is (571) 270-5826. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer C. McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CG

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 4162